

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A heating device for a motor vehicle that includes an internal combustion engine and an engine coolant circuit, the heating device comprising:

a housing defining a heat generation chamber,

a rotor mounted in the heat generation chamber for rotation on a drive shaft,

a cooling jacket defining a cooling chamber in heat exchange relationship with the heat generation chamber, the cooling chamber being adapted for circulating the engine coolant and including a coolant inlet and a coolant outlet, wherein the cooling chamber has a portion that extends in a radial direction of the heating device to substantially the same extent as the heat generation chamber and is axially adjacent to the heat generation chamber, and

a pump wheel driven by the drive shaft, wherein the pump wheel is arranged in said portion of the cooling chamber and is configured to circulate coolant within the cooling chamber,

wherein the cooling jacket comprises cooling ribs that form cooling ducts for the coolant, wherein the cooling ducts run radially outward in approximate spirals from the pump wheel, and wherein the pump wheel is arranged in a center of the spirals.

2. (Previously Presented) The device as claimed in claim 1, wherein the cooling jacket has a central protuberance which is arranged coaxially to the drive shaft, wherein the pump wheel is arranged on one side of the central protuberance along an axial direction of the heating device and an axial end of the drive shaft is arranged on another side of the central protuberance.

3. (Previously Presented) The device as claimed in claim 2, wherein the pump wheel is magnetically driven by the axial end of the drive shaft.

4. (Currently Amended) The device as claimed in claim 3, wherein permanent magnets are fastened on a circumference of a the shaft stub at the axial end of the drive shaft.

5. (Currently Amended) The device as claimed in claim 3, wherein the pump wheel has a hub which is mounted rotatably on the protuberance and in which permanent magnets distributed over the hub's circumference are fastened.

6. (Previously Presented) The device as claimed in claim 3, wherein the pump wheel consists of a magnetizable plastic.

7. (Currently Amended) The device as claimed in claim 1, wherein the pump wheel is designed as an axial/radial wheel and a ~~the~~ coolant inlet connection piece is arranged coaxially to the drive shaft.

8. (Previously Presented) The device as claimed in claim 2, wherein the protuberance consists of a nonmagnetizable material.

9. (Previously Presented) The device as claimed in claim 1, wherein the cooling chamber is formed from the cooling jacket and from a cover and is designed as a heat exchanger.

10. (Canceled)

11. (Canceled)

12. (Currently Amended) The device as claimed in claim ~~[[11]]~~ 9, wherein the ~~[[a]]~~ coolant outlet is arranged on the cooling chamber radially on the outside.

13. (Previously Presented) The device as claimed in claim 1, wherein the heat generation chamber is filled with a viscous medium, and in that the rotor together with the cooling jacket forms at least one operating gap in which the heat is generated by fluid friction.

14. (Currently Amended) A heating device for a motor vehicle, comprising:

a housing defining a heat generation chamber,

a drive shaft,

a rotor mounted in the heat generation chamber, wherein the rotor is driven by the drive shaft,

a cooling jacket defining a cooling chamber, wherein the housing and the cooling jacket are configured so that the heat generation chamber and the cooling chamber are immediately adjacent to one another in an axial direction of the heating device, and

a pump wheel driven by the drive shaft, wherein the pump wheel is arranged in the cooling chamber, axially adjacent to the heat generation chamber, and wherein the pump wheel is configured to circulate coolant in the cooling chamber,

wherein the cooling chamber is formed from the cooling jacket and from a cover, wherein the cooling jacket and/or the cover comprise cooling ribs that form cooling ducts for the coolant, wherein the cooling ducts run radially outward in approximate spirals from the pump wheel, and wherein the pump wheel is arranged in a center of the spirals.

15. (Previously Presented) The device as claimed in claim 14, wherein the cooling jacket defines a central protuberance, wherein the central protuberance separates an axial end of the drive shaft from the pump wheel.

16. (Previously Presented) The device as claimed in claim 15, wherein the pump wheel is magnetically driven by the drive shaft.

17. (Canceled)

18. (Previously Presented) The device as claimed in claim 14, wherein the cooling chamber extends in a radial direction of the heating device to substantially the same extent as the heat generation chamber, wherein the cooling chamber is axially adjacent to the heat generation chamber.

19. (Previously Presented) The device as claimed in claim 1, wherein an axial end of the drive shaft extends through a perforation in the cooling jacket,

wherein the axial end of the drive shaft is sealed to separate the heat generation chamber from the cooling chamber,

wherein the pump wheel is fastened to the axial end of the drive shaft in the cooling chamber.

20. (Previously Presented) The device as claimed in claim 2, wherein the cooling jacket separates the cooling chamber and the heat generation chamber.